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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/629,845	07/30/2003	Wassim Haddad	1509-432	6139

22879 7590 06/07/2007
HEWLETT PACKARD COMPANY
P O BOX 272400, 3404 E. HARMONY ROAD
INTELLECTUAL PROPERTY ADMINISTRATION
FORT COLLINS, CO 80527-2400

EXAMINER

PORTIS, SHANTELL L

ART UNIT	PAPER NUMBER
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2617

MAIL DATE	DELIVERY MODE
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06/07/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/629,845	HADDAD, WASSIM	
	Examiner	Art Unit	
	Shantell Portis	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 March 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date. _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed on March 7, 2007 have been fully considered but they are not persuasive. The applicant argues that Cromer fails to disclose ***a control unit operable to perform the method as recited in claim 1***. Cromer et al. discloses an apparatus and method for providing dynamic load balancing of network bandwidth between access points. The access points 200 via control unit 202 generates and monitors average bandwidth utilization of client devices connected to said access point. See Abstract and Paragraphs [0031], [0038], [0041] and [0044].

Therefore, the examiner maintains the rejections as set forth below.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 2, 4, 6-8, 10 and 12-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Cromer et al. (Cromer), U.S. Publication No. 2004/0001467.

Regarding Claims 1, 7 and 13-16, Cromer discloses a method of allocating bandwidths in a wireless LAN comprising a plurality of access points each using the same wireless technology for data communication with users and a control unit, the method comprising the steps of: a) continuously monitoring bandwidth usage by each of the access points via the control unit **(102, 106, 110 and 114)(each access point monitor the bandwidth usage of each client by means of table 500 [0038])**; and b) re-allocating bandwidth from a low bandwidth usage access point to a high bandwidth usage access point **(if the aggregate bandwidth is equal or above the threshold, the redistribution flag is set and the access point can request client devices to be sent to another access point with available capacity, therefore, reallocating bandwidth of the new access point from a lower to higher bandwidth usage [0041] and [0044])**.

Regarding Claims 2, 8 and 13-16, Cromer discloses wherein the access points each use the 802.11 wireless technology **(the wireless network 120 utilize protocols set forth in IEEE 802.11 [0029])**.

Regarding Claims 4, 10, 13 and 15, Cromer discloses wherein step b) the control unit is configured to re-allocate a first sub-bandwidth associated with the low bandwidth usage access point to complement a second sub-bandwidth associated with the high bandwidth usage access point, and the method further comprises the step of said control unit expanding the coverage of a third access point using the third sub-bandwidth for data communication with the users of the access point previously operating under the first sub-bandwidth **(if the aggregate bandwidth is equal or**

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above the threshold, the redistribution flag is set and the access point can request client devices to be sent to another access point with available capacity. The requesting access point with the high bandwidth usage will be complemented by the receiving access point with the lower bandwidth and extra capacity [0041] and [0044]).

Regarding Claims 6, 12, 14 and 16, Cromer discloses wherein step b) the control unit is such as to re-allocate at least one bandwidth channel from the low bandwidth usage access point to the high bandwidth usage access point (if the aggregate bandwidth is equal or above the threshold, the redistribution flag is set and the access point can request client devices to be sent to another access point with available capacity, therefore, reallocating bandwidth of the new access point from a lower to higher bandwidth usage [0041] and [0044]).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3-6 and 9-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cromer.

Regarding Claims 3, 4, 9, 10, 13 and 15, Cromer discloses the method and wireless LAN as described above. Cromer does not specifically disclose wherein the 802.11 wireless technology uses DSSS. However, Cromer does mention in the background of the invention that IEEE 802.11 RF transmissions use multiple signaling schemes at different data rates to deliver data packets between wireless systems. The latest IEEE 802.11 wireless LAN uses a band of frequencies near 2.4 Ghz for direct sequence spread spectrum (DSSS) transmissions [0009]. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use multiple signaling schemes [0009].

Regarding Claims 5, 6, 11, 12, 14 and 16, Cromer discloses the method and wireless LAN as described above. Cromer does not specifically disclose wherein the 802.11 wireless technology operates under FHSS. However, Cromer does mention in the background of the invention that IEEE 802.11 RF transmissions use multiple signaling schemes at different data rates to deliver data packets between wireless systems. The Bluetooth standard is a low cost short range of frequencies for its frequency hopping spread spectrum (FHSS) transmissions as the IEEE 802.11 standard [0009]. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use systems employing IEEE 802.11 concurrently with other systems using the Bluetooth standard [0009].

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Qui et al., U.S. Publication No. 2003/0212787 discloses an adaptive allocation of last-hop bandwidth based on monitoring of end-to-end throughput.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shantell Portis whose telephone number is 571-272-0886. The examiner can normally be reached on Monday-Friday 7:00am-3:30pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on 571-272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



SLP



LESTER G. KINCAID
SUPERVISORY PRIMARY EXAMINER